MEMORANDUM

DATE: DECEMBER 4, 2007

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: JAMES K. HARTMANN, CITY MANAGER

SUBJECT: CONSIDERATION OF CHANGES TO THE CITY CODE REGARDING THE REQUIREMENTS FOR SUBMITTING GRADING PLANS AND THE ENFORCEMENT OF THOSE REQUIREMENTS

ISSUE: Clarification of the requirements for submitting grading plans, and providing for better enforcement of these requirements.

RECOMMENDATION: That City Council approve the attached ordinance on first reading and set it for public hearing, second reading and final passage on December 15, 2007.

DISCUSSION: T&ES has the responsibility for ensuring that storm water and groundwater runoff on private properties does not create a nuisance on adjacent properties or within the public right of way. T&ES frequently receives complaints from adjacent property owners with concerns relating to grading and storm water runoff associated with the construction of new homes or large additions on neighboring properties. These complaints are often made while the construction activity is ongoing, although some complaints aren't received until after the construction is completed. The complaints are generally associated with changes to drainage patterns on the site as a result of re-grading, installation of new roof drains and sump pumps, and denuding of vegetated areas on the property. Given lot sizes and topography in Alexandria, changes in drainage systems and patterns on one lot can have a negative impact on neighboring properties.

These complaints have increased in recent years due to infill with its increase in volume of sizeable additions and new homes being constructed throughout the City.

T&ES has always required a grading plan to be submitted for new homes, but has used administrative discretion regarding large additions to existing homes. There are about 40 cases per year where grading plans have been administratively requested but now would be mandated by Code. Because of the volume of permit applications that have been processed in recent years and because many recent additions have been quite large, T&ES is proposing to standardize the requirements for grading plans. Staff is proposing that in addition to new homes, grading plans
be required for additions that increase the building footprints by 100% or more; an addition that results in less than 50% of the existing exterior walls remaining (essentially demolishing most of the house to construct a new house); changes the existing grade on the property by one foot or greater; changes the existing drainage patterns on the property; or creates a land disturbance of greater than 2,500 square feet.

A grading plan is an engineered plan that is simpler than a site plan. It shows existing and proposed topography, drainage patterns and drainage outfalls, as well as the footprint of the existing and proposed structures. This required information is necessary for T&ES engineers to evaluate the drainage patterns on the property and onto adjacent properties or public rights-of-way. The cost for an engineered grading plan to be developed would run about $5,000 to $10,000 per plan.

T&ES staff has reviewed the requirements for similar type plans in neighboring jurisdictions and has used similar requirements in the attached ordinance. In addition, T&ES is proposing the charge of a $500 fee for the review and processing of these plans. At this time, no fee is charged even though these plans often require several rounds of review and individual meetings with the applicants. This fee is similar in magnitude to the adjacent jurisdictions.

T&ES is coordinating with the departments of Code Enforcement and Planning & Zoning to ensure that property owners who are considering construction projects that will meet these thresholds are advised of these requirements early in the planning stages.

Both Arlington County and Fairfax County have similar grading plan requirements and fees for new homes and large home additions.

**FISCAL IMPACT:** The $500 fee, while it will increase revenues to some degree, will offset costs related to review and approval of grading plans. About $20,000 per year should be collected under this new fee.

**ATTACHMENT:** Proposed Ordinance.

**STAFF:**
Richard J. Baier, P.E., Director, T&ES
Emily A. Baker, P.E., City Engineer
Christopher Spera, Assistant City Attorney
AN ORDINANCE to amend and reordain Section 8-1-22 (METHOD OF STORM AND
SUBSURFACE WATER DISPOSAL) and Section 8-1-30 (VIOLATIONS AND
PENALTIES), of Article B (MISCELLANEOUS CONDITIONS OF PERMITS), Chapter 1
(BUILDING CODE), Title 8 (BUILDING CODE REGULATIONS), of the Code of the
City of Alexandria, Virginia, 1981, as amended.

Summary
The proposed ordinance provides for the submission, review and approval of grading and
drainage plans as part of the development review process for infill development.

Sponsor
Richard Baier, Director, T&ES
Christopher Spera, Assistant City Attorney

Authority
§§ 2.04(b), 2.04(m), Alexandria City Charter

Estimated Costs of Implementation
See memorandum from the City Manager

Attachments in Addition to Proposed Ordinance and its Attachments (if any)
None

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ORDINANCE NO. 3

AN ORDINANCE to amend and reordain Section 8-1-22 (METHOD OF STORM AND SUBSURFACE WATER DISPOSAL) and Section 8-1-30 (VIOLATIONS AND PENALTIES), of Article B (MISCALLANEOUS CONDITIONS OF PERMITS), Chapter 1 (BUILDING CODE), Title 8 (BUILDING CODE REGULATIONS), of the Code of the City of Alexandria, Virginia, 1981, as amended.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Section 8-1-22 of The Code of the City of Alexandria, 1981 as amended, be, and the same hereby is, amended and reordained to read as follows:

Sec. 8-1-22 Method of storm and subsoil water disposal.

(a) Buildings shall have drainage provision for conveying storm water from roofs, paved areas and areaway drains, Subsoil water, condensate, cooling water, etc., on the premise to a public storm sewer: except that where a public storm sewer is not available, an approved method of disposal shall be provided to the satisfaction of the director of transportation and environmental services.

(b) Availability.

(1) For a one-and two-family dwelling, a public storm sewer shall be deemed available when such sewer is within 100 feet of the premises on which the dwelling is located, measured along a street, and a connection may be made lawfully thereto.

(2) For any other buildings, a public storm sewer shall be deemed available when such sewer is within 500 feet of the premises on which the building is located, measured along a street, and a connection may be made lawfully thereto.

(c) Area drains are prohibited from entering septic tanks or public or private sewer systems unless specifically approved in writing by the director of transportation and environmental services.

(d) Prior to the issuance of any building permit for any proposed improvement to real property involving (1) the construction of a new home (2) construction of an addition to an existing home where either (A) the addition exceeds the area of the existing building footprint by 100% or more; or (B) the construction of the addition results in less than 50% of the existing first floor exterior walls, in their entirety, remaining; (3) changes to the existing grade elevation of 1 foot or greater; (4) changes to existing drainage patterns; or (5) land disturbance of 2,500 square feet or greater, a grading and drainage plan prepared by a professional engineer or land surveyor licensed by the Commonwealth of Virginia shall be submitted for review and approval by the Director of Transportation & Environmental Services or his designee. Such plan
shall demonstrate that post-development drainage will have no greater impact on
adjacent or downstream property than pre-development conditions. The
requirements for such plans, including without limitation form, content, methods of
calculation, and procedures for review and approval, shall be established by
regulations promulgated by the Director of Transportation & Environmental
Services. A plan review fee in the amount of $500 shall accompany such plan,
except that in instances where the proposed improvement is already subject to the
erosion and sediment control requirements set forth in section 5-4-1, et seq. of this
Code, and a fee has already been paid pursuant to those requirements, no additional
fee shall be required. No building permit for improvements subject to this subsection
shall be issued until after the grading and drainage plan has been approved.

Section 2. That Section 8-1-30 of The Code of the City of Alexandria, 1981 as amended,
be, and the same hereby is, amended and reordained to read as follows:

Sec. 8-1-30 Violations and penalties.

(a) With the exception of violations of section 8-1-22, a violation of any section or
provision of this article shall be a misdemeanor, and any person found guilty of any such
violation shall, upon conviction, be punished by a fine of not more than $500. Each day a
violation of any section or provision of this article continues shall be deemed a separate
violation. Notwithstanding the foregoing, if the violation of a section or provision of this
article is also a violation of a section or provision of article A of this chapter, then section
8-1-6 shall apply to the violation in lieu of this section.

(b) A violation of any section or provision of this article may, in addition to and
notwithstanding the penalty provided for in subsection (a) (c) or (d), be restrained,
prohibited or enjoined by appropriate proceedings in a court of competent jurisdiction.

(c) Notwithstanding the provisions of subsection (a) and (b), any action or omission
constituting a violation of a section or provision of this article which also constitutes a
violation of a section or provision of article A shall only be subject to the penalties in
section 8-1-6.

(d) Any violation of section 8-1-22 of this article shall be a civil violation that shall be
enforced through the levying of a civil penalty, pursuant to section 1-1-11 of this
code, of $100 for a person’s first violation and of $150 for each subsequent violation
of the same section or provision. Each day during which a violation exists shall
constitute a separate violation. However, a series of violations arising from the same
operative set of facts shall not give rise to the levying of a civil penalty more
frequently than once in any 10-day period, and shall not result in civil penalties
exceeding a total of $3,000.

(e) In addition to the foregoing penalties, in the event that any person obtains a building
permit based on representations that exempt the proposed construction from the
grading and drainage plan requirements of Section 8-1-22(d), and those
representations prove to be incorrect, the Director of Transportation & Environmental
Services or his designee may issue a written order stopping all work at the site until
such time as a grading and drainage plan has been submitted for review and approved pursuant to Section 8-1-22(d).

Section 3. That this ordinance shall become effective on the date and at the time of final passage.

William D. Euille
Mayor

12/11/07